

SilSo SE2014 2 part encapsulation and potting silicone

Description	Property	Test Method	Value
This is a 2-component, silicone elastomer system specially designed for electronic potting and encapsulation applications. It offers good protection against chemicals, environmental contamination, mechanical shock, vibration and impact damage. It can be employed in areas where low flammability is a prerequisite. The cured elastomer can be repaired. The component parts have relatively low viscosities and are readily mixed either by hand or machine.	Uncured Product		
	Appearance		Viscous liquid
Key Features	Color A		Off white
	Color B		Green
	Cure Profile		>23°C
	Cure Type		Addition
Application Coating for the umbilical cable ROV underwater remotely operated vehicles	Density A	BS ISO 2781	0.79
	Density B	BS ISO 2781	0.77
	Mix Ratio By Weight		1:1
	Pot Life hrs at 23°C/73°F		6 hours
	Rheology		Liquid
	Self Bonding		No
	Viscosity A	Brookfield	12200 cP
	Viscosity B	Brookfield	7200 cP
	Viscosity Mixed	Brookfield	10000 cP
	Use and Cure Information IMPORTANT: The 'A' part of the product contains the platinum catalyst, great care should be taken when using automatic dispensing equipment. Please ensure that it is not contaminated by residual hydride containing rubber in the dispensing equipment, as curing will result. If in doubt, it's advised to thoroughly purge the equipment with a suitable hydrocarbon solvent or silicone fluid.	Cured Product	
177°C for 17 minutes			
Color			Green
Density		BS ISO 2781	0.73 g/cm3
Elongation at Break		ISO 37	54 %
Hardness Shore A		ASTM D 2240-95	67
Linear Coefficient of Thermal Expansion (ppm/°C)			218 ppm/°C
Max Working Temp			200 °C / 392 °F
Min Working Temp			-55 °C / -67 °F
Tensile Strength		ISO 37	2.7 N/mm2 / 392 psi
Mixing Both the 'A' and 'B' parts should be well stirred to ensure the material is uniform and any settled the fillers have been remixed. Place the required amount of 'A' and 'B' parts by weight at the mix ratio shown opposite, in a clean plastic or metal container of approximately 3 times their volume, and mix until the colour of the mixture is uniform. For best results, we recommend degassing. Degas by intermittent evacuation, the larger volume of the mixing vessel helps prevent overflow during this operation. In the case of automatic dispensing with static mixing head, the two components should be degassed before processing. Recommended vacuum conditions are 30-50 mbar intermittently over 5-10 minutes. Cast the mixture either by gravity or pressure injection.	Thermal Conductivity		0.14 W/mK
	Volume Coefficient of Thermal Expansion (ppm/°C)		818 ppm/°C
	Electrical Properties		
	Dielectric Constant	ASTM D-150	2.29
	Dielectric Strength kV/mm	ASTM D-149	32.1 kV/mm / 816 V/mil
	Dissipation Factor	ASTM D-150	0.00174
	Volume Resistivity (Ohms cm)	ASTM D-257	1E+15 ohms cm
	Storage		
	Max Storage Temperature		30 °C / 86 °F
	Shelf Life		12 mths
Inhibition of Cure Great care must be taken when handling and mixing all addition cured silicone elastomer systems, ensuring that all the mixing tools (vessels and spatulas) are clean and constructed in materials which do not interfere with the curing mechanism. The cure of the rubber can be inhibited by the presence of compounds of nitrogen, sulphur, phosphorus and arsenic; organotin catalysts and PVC stabilizers; epoxy resin catalysts and even contact with materials containing certain of these substances e.g. moulding clays, sulphur vulcanised rubbers, condensation cure silicone rubbers, onion and garlic.			
	Curing Conditions		
The data offers a guide to the rate of cure at various temperatures, mixing of the components at temperatures between 15 and 25°C is recommended to ensure adequate pot life for degassing and handling. The pot life can be extended to several hours by chilling the components before mixing.			
It is important to check the compatibility in preliminary tests if unknown substrates are used.			
Health & Safety			
Safety Data Sheets available on request.			
Packaging			
CHT Encapsulants are available in a variety packaging including bulk containers. Please contact our sales department for more information.			

The content set out in the technical data sheet does not contain information upon which you should rely. It is provided for general information purposes only and does not constitute a product specification. You must obtain professional or specialist advice before taking any action based on the information provided in the technical data sheet. CHT make reasonable efforts to ensure that information set out in the technical data sheet is complete, accurate, and up-to-date. CHT do not, however, make any representations, warranties or guarantees (whether express or implied) that information set out in the technical data sheet is complete, accurate, or up-to-date or that the product will be suitable for your requirements. You should carry out your own testing to determine the applicability of such information and whether the product will be suitable. CHT reserve the right to modify the technical data sheet at any time. The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.

CHT Germany GmbH: Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany
Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com / www.cht-silicones.com

Revision Date 21 Sep 2022
Revision No 2
Download Date 18 Sep 2024

The content set out in the technical data sheet does not contain information upon which you should rely. It is provided for general information purposes only and does not constitute a product specification. You must obtain professional or specialist advice before taking any action based on the information provided in the technical data sheet.

CHT make reasonable efforts to ensure that information set out in the technical data sheet is complete, accurate, and up-to-date. CHT do not, however, make any representations, warranties or guarantees (whether express or implied) that information set out in the technical data sheet is complete, accurate, or up-to-date or that the product will be suitable for your requirements. You should carry out your own testing to determine the applicability of such information and whether the product will be suitable. CHT reserve the right to modify the technical data sheet at any time. The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.

CHT Germany GmbH: Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany
Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com / www.cht-silicones.com